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1 D A H K S E V A H R F K D L G E E N F K 20  
  
61 GCC TTG GTG TTG ATT GCC TTT GCT CAG TAT CTT CAG CAG TGT CCA TTT GAA GAT CAT GTA 120  
21 A L V L I A F A Q Y L Q C P F E D H V 40  
  
121 AAA TTA GTG AAT GAA GTA ACT GAA TTT GCA AAA ACA TGT GTT GCT GAT GAG TCA GCT GAA 180  
41 K L V N E V T E F A K T C V A D E S A E 60  
  
181 AAT TGT GAC AAA TCA CTT CAT ACC CTT TTT GGA GAC AAA TTA TGC ACA GTT GCA ACT CTT 240  
61 N C D K S L H T L F G D K L C T V A T L 80  
  
241 CGT GAA ACC TAT GGT GAA ATG GCT GAC TGC TGT GCA AAA CAA GAA CCT GAG AGA AAT GAA 300  
81 R E T Y G E M A D C C A K Q E P E R N E 100  
  
301 TGC TTC TTG CAA CAC AAA GAT GAC AAC CCA AAC CTC CCC CGA TTG GTG AGA CCA GAG GTT 360  
101 C F L Q H K D D N P N L P R L V R P E V 120  
  
361 GAT GTG ATG TGC ACT GCT TTT CAT GAC AAT GAA GAG ACA TTT TTG AAA AAA TAC TTA TAT 420  
121 D V M C T A F H D N E E T F L K K Y L Y 140  
  
421 GAA ATT GCC AGA AGA CAT CCT TAC TTT TAT GCC CCG GAA CTC CTT TTC TTT GCT AAA AGG 480  
141 E I A R R H P Y F Y A P E L L F F A K R 160

Figure 1A

481 TAT AAA GCT GCT TTT ACA GAA TGT TGC CAA GCT GCT GAT AAA GCT GCC TGC CTG TTG CCA 540  
 161 Y K A A F T E C C Q A A D K A A C L L P 180

541 AAG CTC GAT GAA CTT CGG GAT GAA GGG AAG GCT TCG TCT GCC AAA CAG AGA CTC AAA TGT 600  
 181 K L D E L R D E G K A S S A K Q R L K C 200

601 GCC AGT CTC CAA AAA TTT GGA GAA AGA GCT TTC AAA GCA TGG GCA GTG GCT CGC CTG AGC 660  
 201 A S L Q K F G E R A F K A W A V A R L S 220

661 CAG AGA TTT CCC AAA GCT GAG TTT GCA GAA GTT TCC AAG TTA GTG ACA GAT CTT ACC AAA 720  
 221 Q R F P K A E F A E V S K L V T D L T K 240

721 GTC CAC ACG GAA TGC TGC CAT GGA GAT CTG CTT GAA TGT GCT GAT GAC AGG GCG GAC CTT 780  
 241 V H T E C C H G D L L E C A D D R A D L 260

781 GCC AAG TAT ATC TGT GAA AAT CAG GAT TCG ATC TCC AGT AAA CTG AAG GAA TGC TGT GAA 840  
 261 A K Y I C E N Q D S I S S K L K E C C E 280

841 AAA CCT CTG TTG GAA AAA TCC CAC TGC ATT GCC GAA GTG GAA AAT GAT GAG ATG CCT GCT 900  
 281 K P L L E K S H C I A E V E N D E M P A 300

901 GAC TTG CCT TCA TTA GCT GCT GAT TTT GTT GAA AGT AAG GAT GTT TGC AAA AAC TAT GCT 960  
 301 D L P S L A A D F V E S K D V C K N Y A 320

Figure 1B

961 GAG GCA AAG GAT GTC TTC CTG GGC ATG TTT TTG TAT GAA TAT GCA AGA AGG CAT CCT GAT 1020  
 321 E A K D V F L G M F L Y E Y A R R H P D 340

1021 TAC TCT GTC CTG CTG CTG CTG AGA CTT GCC AAG ACA TAT GAA ACC ACT CTA GAG AAG TGC 1080  
 341 Y S V V L L L R L A K T Y E T T L E K C 360

1081 TGT GCC GCT GCA GAT CCT CAT GAA TGC TAT GCC AAA GTG TTC GAT GAA TTT AAA CCT CTT 1140  
 361 C A A A D P H E C Y A K V F D E F K P L 380

1141 GTG GAA GAG CCT CAG AAT TTA ATC AAA CAA AAC TGT GAG CTT TTT GAG CAG CTT GGA GAG 1200  
 381 V E E P Q N L I K Q N C E L F E Q L G E 400

1201 TAC AAA TTC CAG AAT GCG CTA TTA GTT CGT TAC ACC AAG AAA GTA CCC CAA GTG TCA ACT 1260  
 401 Y K F Q N A L L V R Y T K K V P Q V S T 420

1261 CCA ACT CTT GTA GAG GTC TCA AGA AAC CTA GGA AAA GTG GGC AGC AAA TGT TGT AAA CAT 1320  
 421 P T L V E V S R N L G K V G S K C C K H 440

1321 CCT GAA GCA AAA AGA ATG CCC TGT GCA GAA GAC TAT CTA TCC GTG GTC CTG AAC CAG TTA 1380  
 441 P E A K R M P C A E D Y L S V V L N Q L 460

1381 TGT GTG TTG CAT GAG AAA ACG CCA GTA AGT GAC AGA GTC ACA AAA TGC TGC ACA GAG TCC 1440  
 461 C V L H E K T P V S D R V T K C C T E S 480

Figure 1C

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481 L V N R R R P C F S A L E V D E T Y V P K 500

1501 GAG TTT AAT GCT GAA ACA TTC ACC TTC CAT GCA GAT ATA TGC ACA CTT TCT GAG AAG GAG 1560
501 E F N A E T F T F H A D I C T L S E K E 520

1561 AGA CAA ATC AAG AAA CAA ACT GCA CTT GTT GAG CTT GTG AAA CAC AAG CCC AAG GCA ACA 1620
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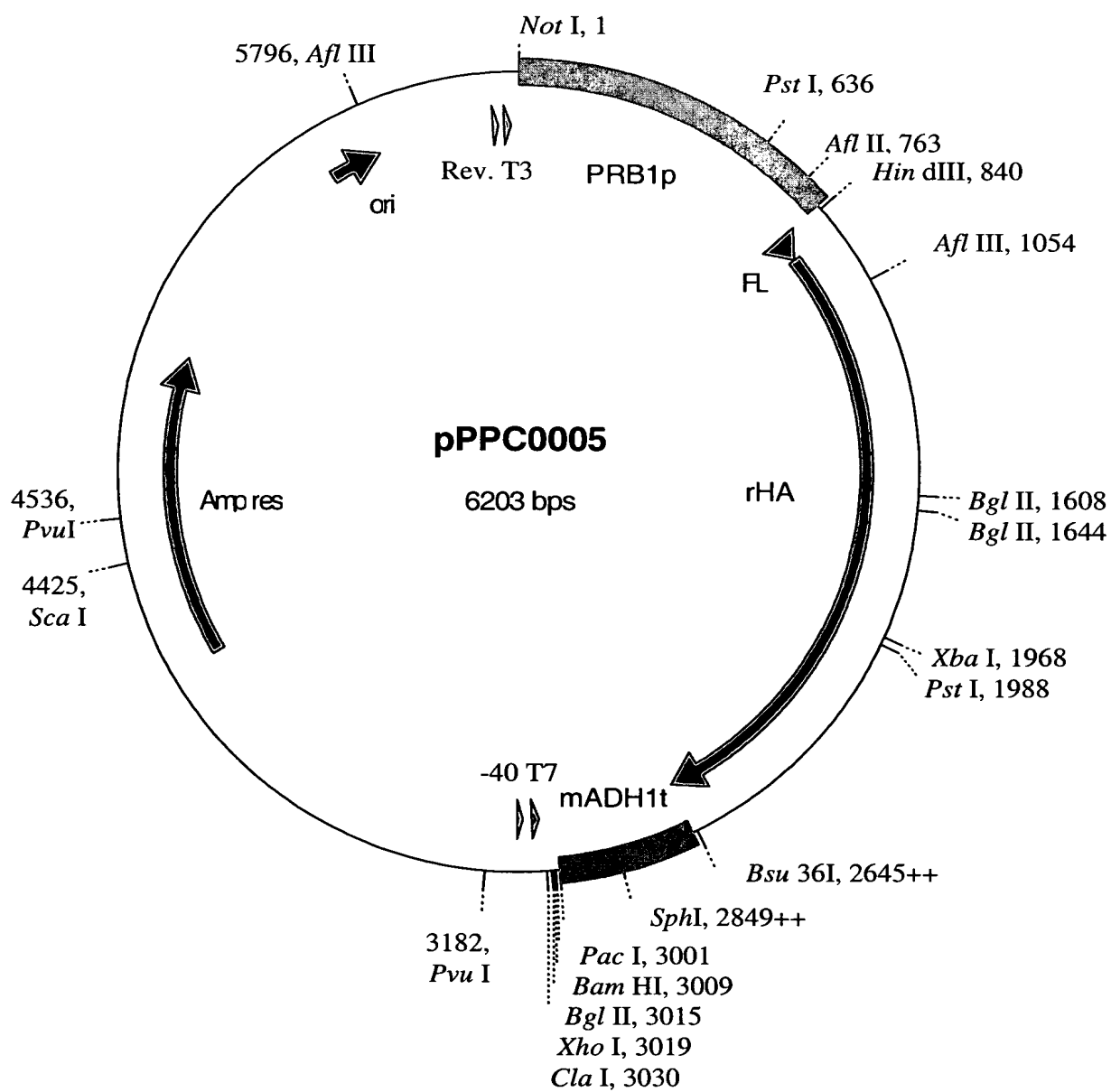
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1681 GCT GAC GAT AAG GAG ACC TGC TTT GCC GAG GAG GGT AAA AAA CTT GTT GCT GCA AGT CAA 1740
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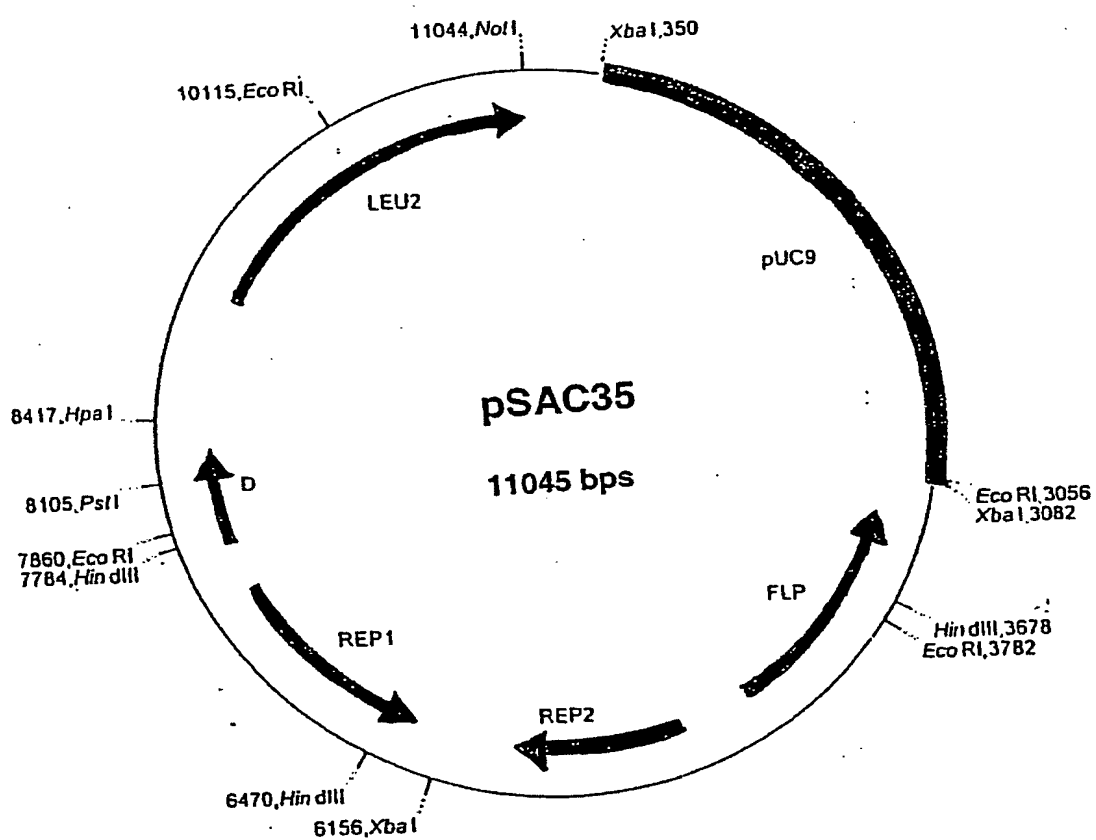
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Figure 1D

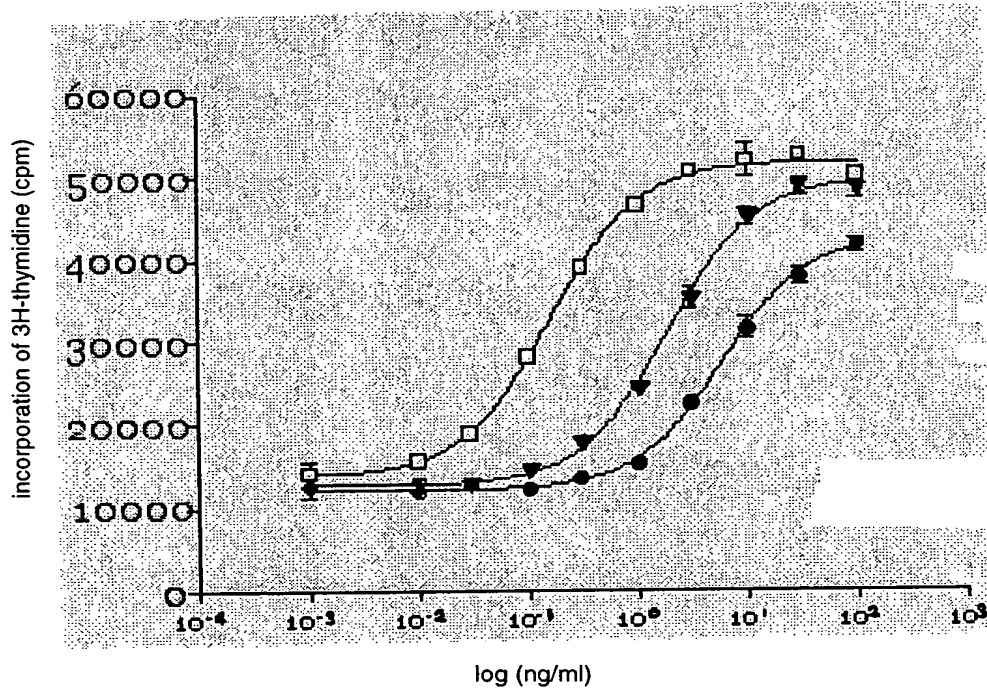


**Figure 2**



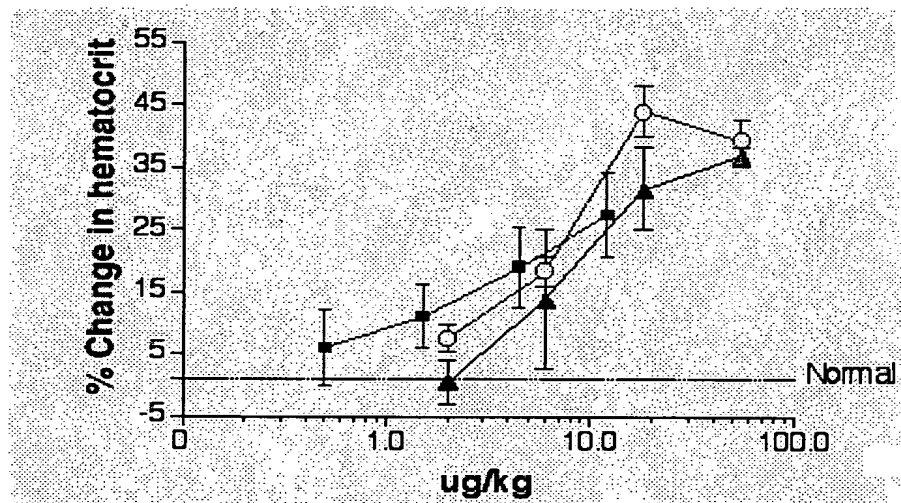
**Figure 3**

**Comparison of the effect of Epo albumin fusion proteins  
CID 1981, CID 1966, and recombinant human Epo on the  
proliferation of TF-1 cells.**



**Figure 4**

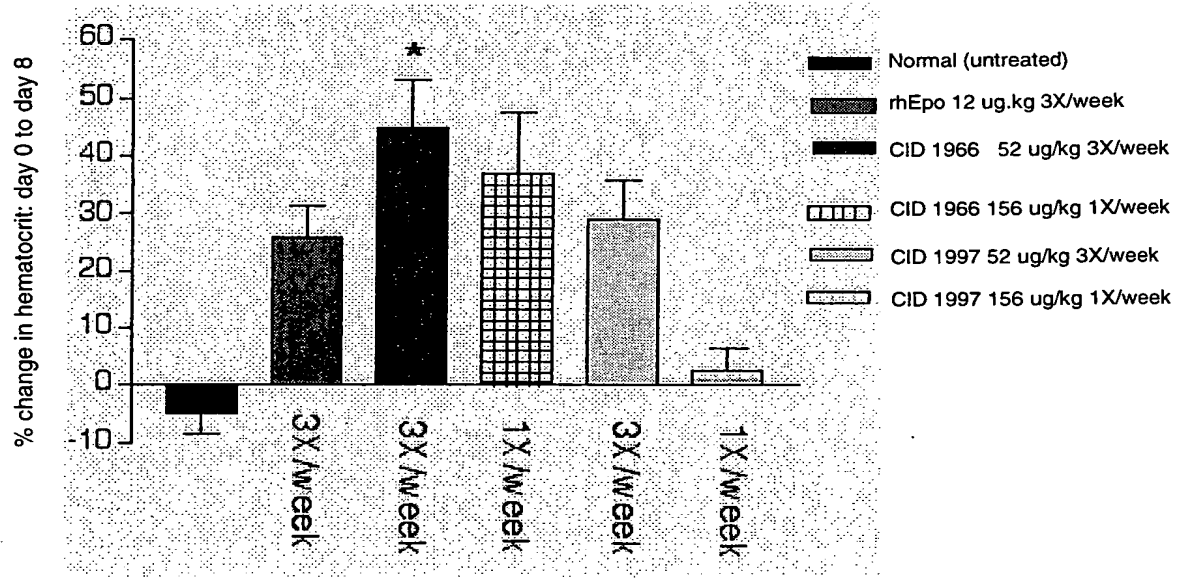
**Comparison of the effect of recombinant human Epo and Epo albumin fusion proteins on the % change in hematocrit from day 0 to day 7: dose-response analysis**



**Figure 5**

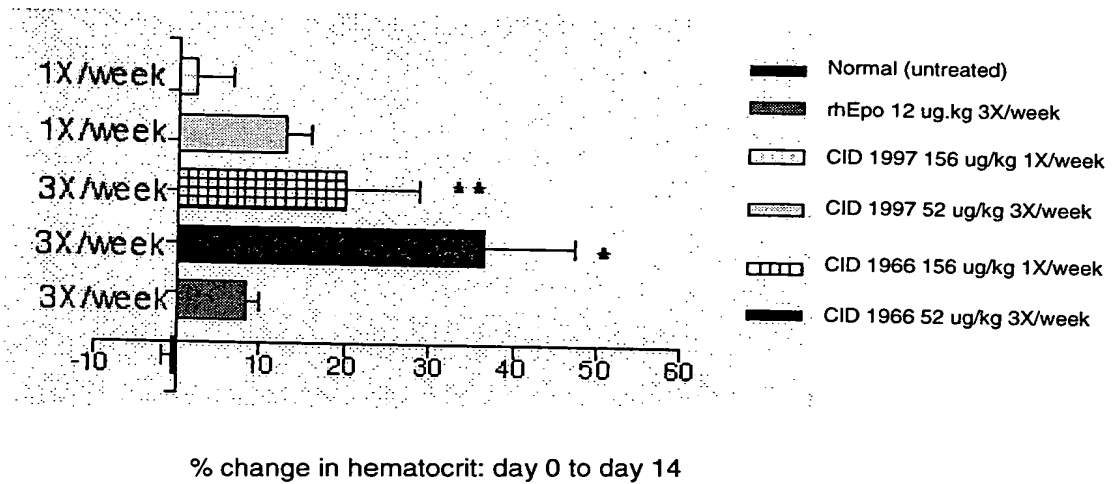


**Dose schedule: Comparison of the effect of Epo albumin fusion proteins on % change in hematocrit**



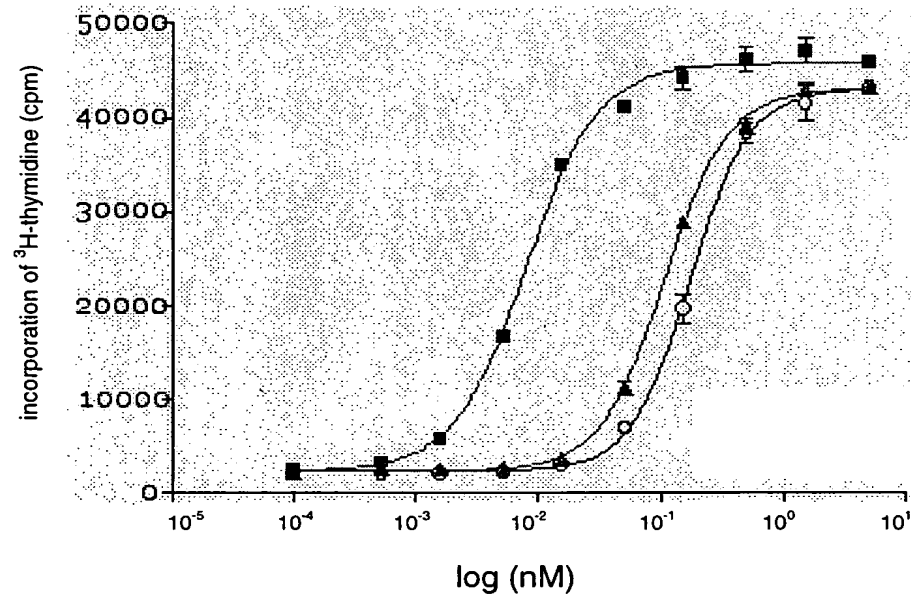
**Figure 6A**

**Dose schedule: Comparison of the effect of Epo albumin  
Fusion proteins on % change in hematocrit**



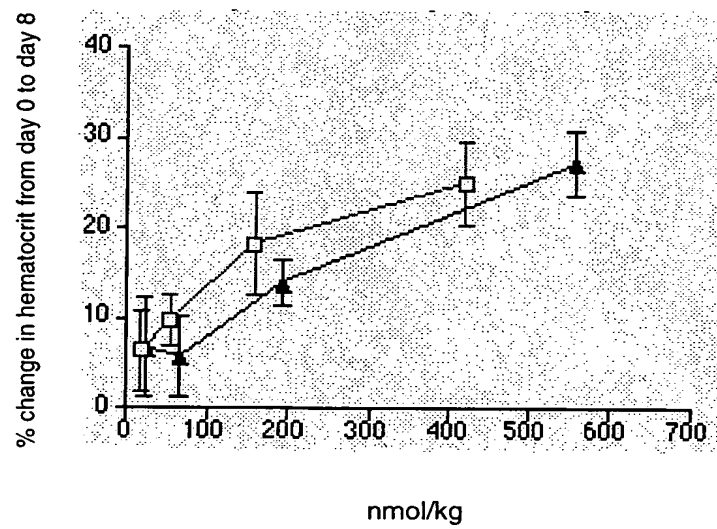
**Figure 6B**

**Comparison of the effect of Epo albumin fusion proteins and recombinant human Epo on the proliferation of TF-1 cells**



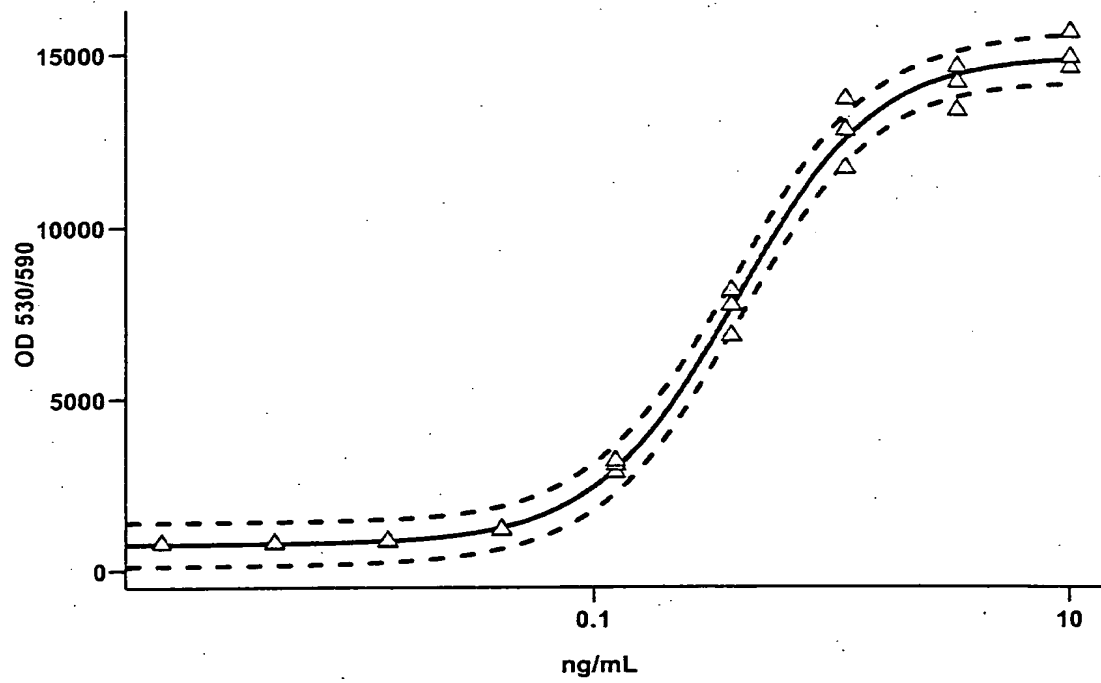
**Figure 7**

**Comparison of the effect of recombinant human Epo and Epo albumin fusion protein encoded by CID 1997 on the % change in hematocrit from day 0 to day 8: dose-response analysis**



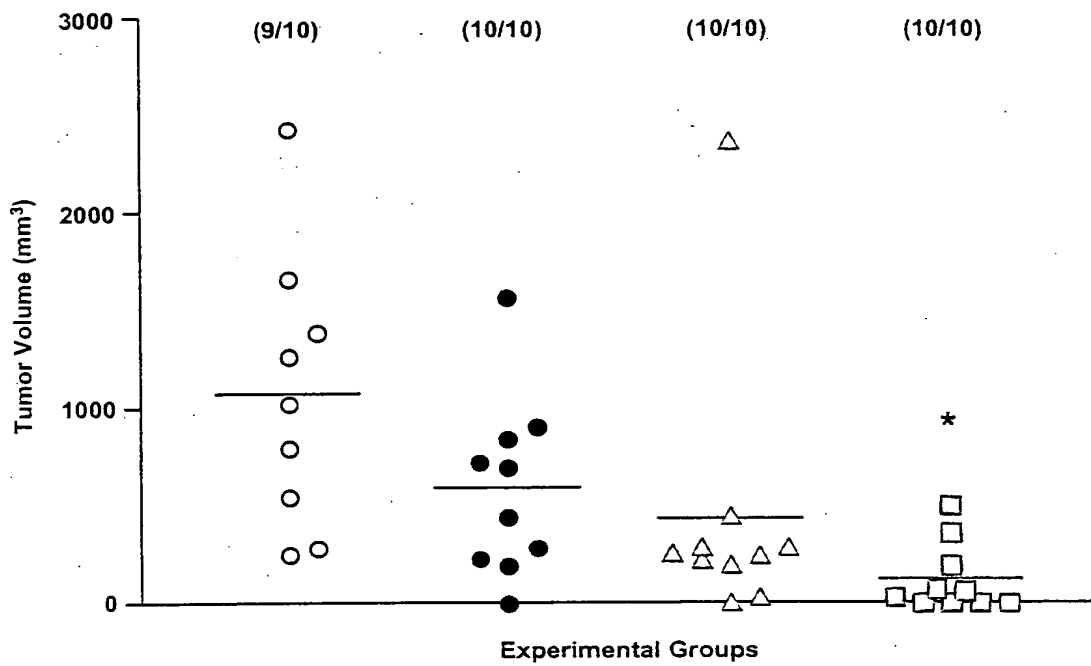
**Figure 8**

**Activity of IL-2 albumin fusion protein encoded by  
CID 1812 in the CTLL-2 proliferation assay**



**Figure 9**

**Effect of IL2 albumin fusion protein encoded by CID 1812 on RENCA tumor growth in BALB/c mice: Day 21**



**Figure 10**

Response of NFS-60 cells to G-CSF albumin fusion proteins (supernatants)

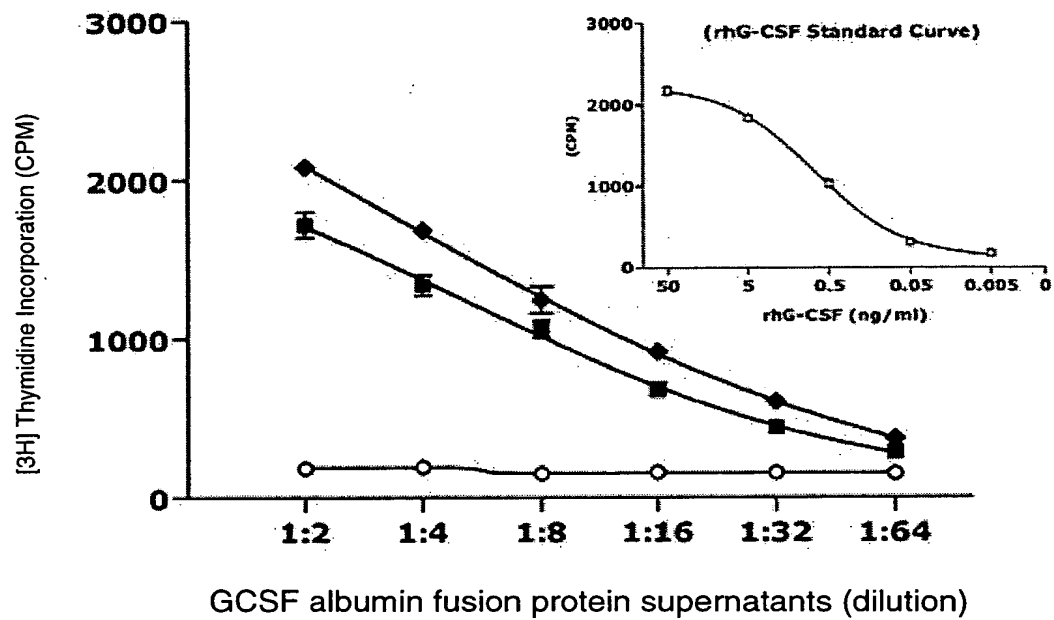
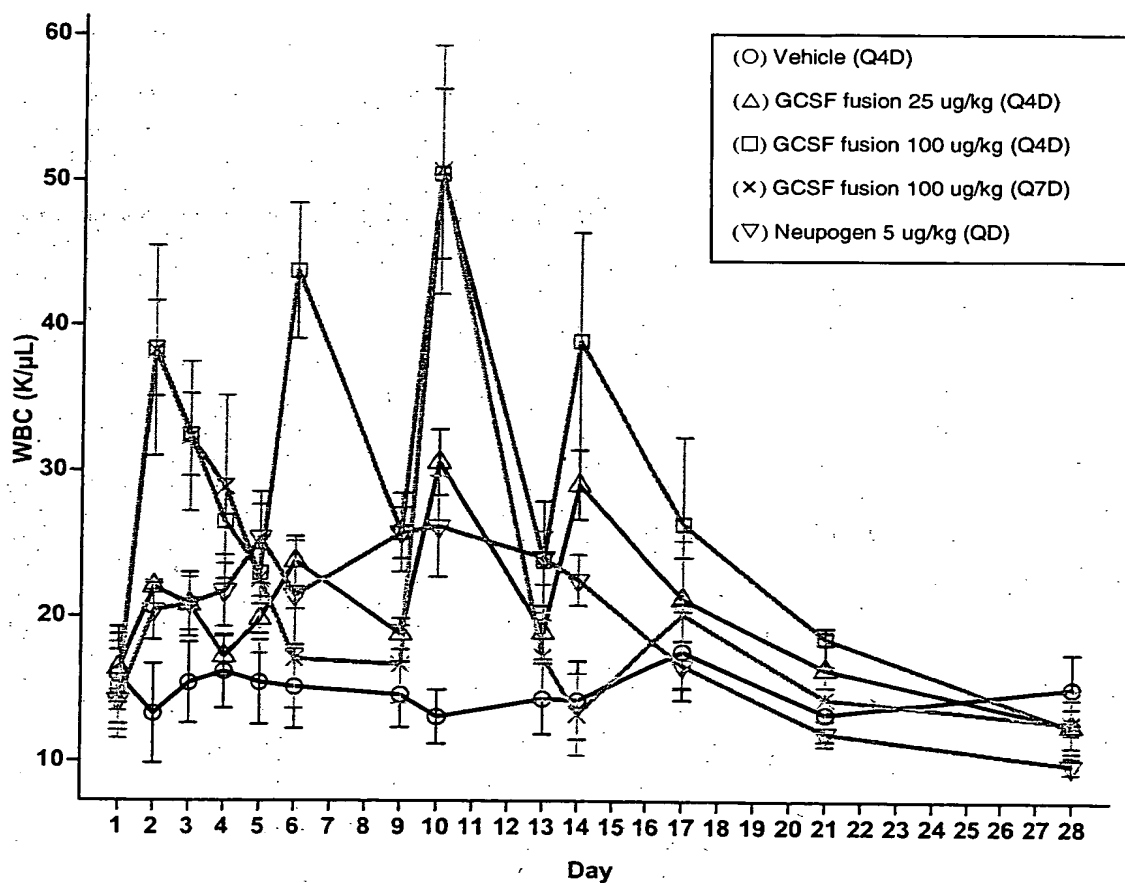


Figure 11

**Effects of GCSF albumin fusion protein (GCSF fusion)  
on total white blood cell count (WBC)**



**Figure 12**



# Dose responses of IFN $\beta$ albumin fusion proteins

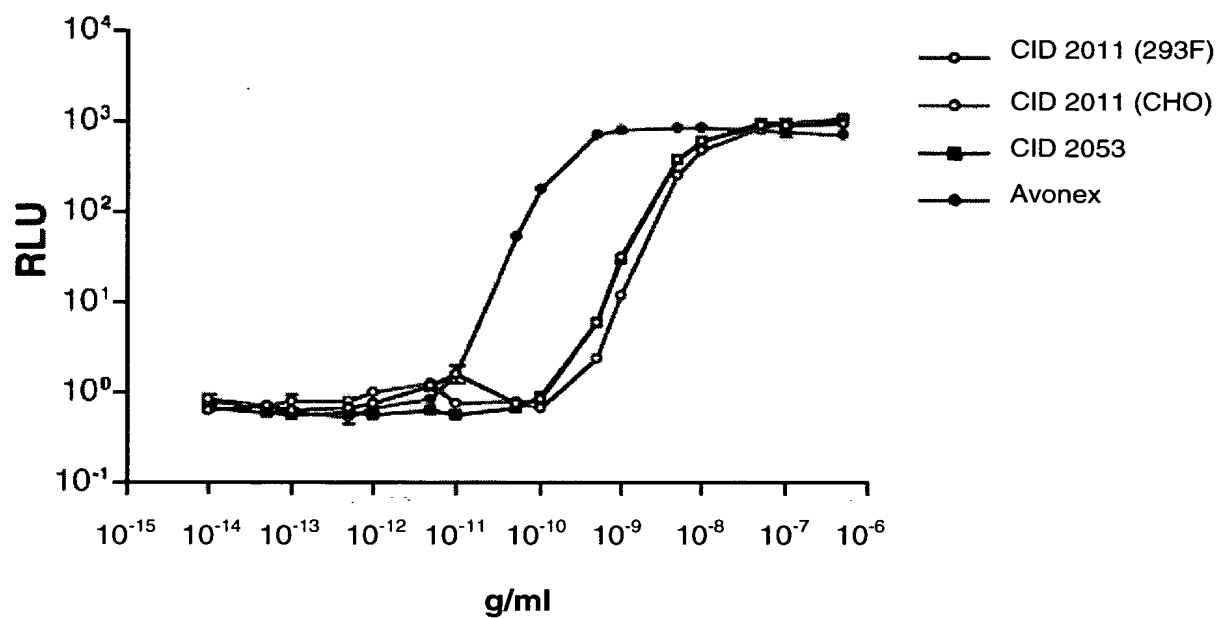
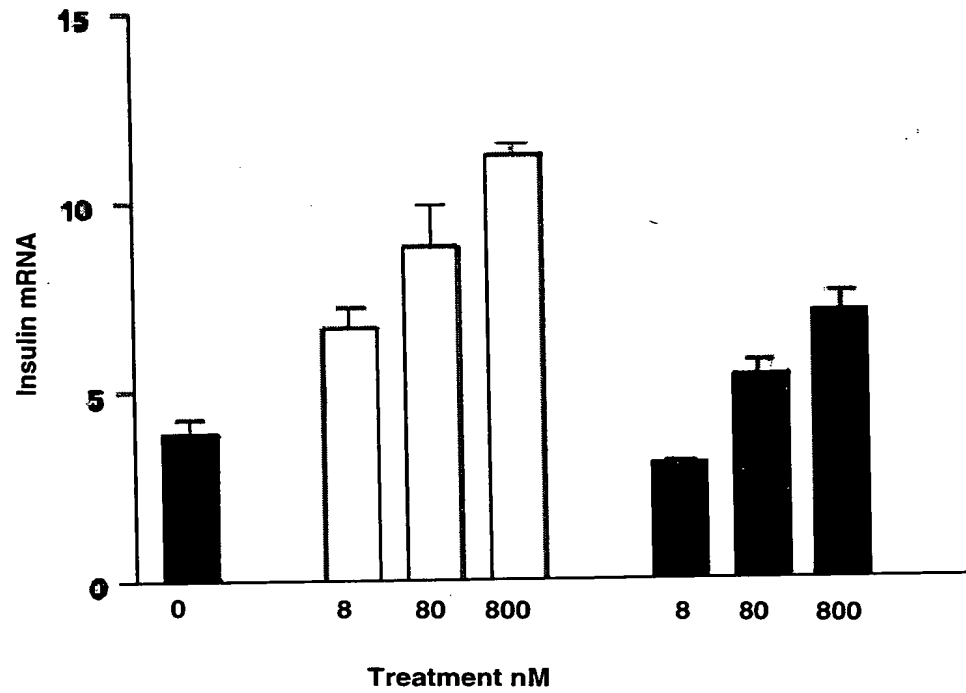


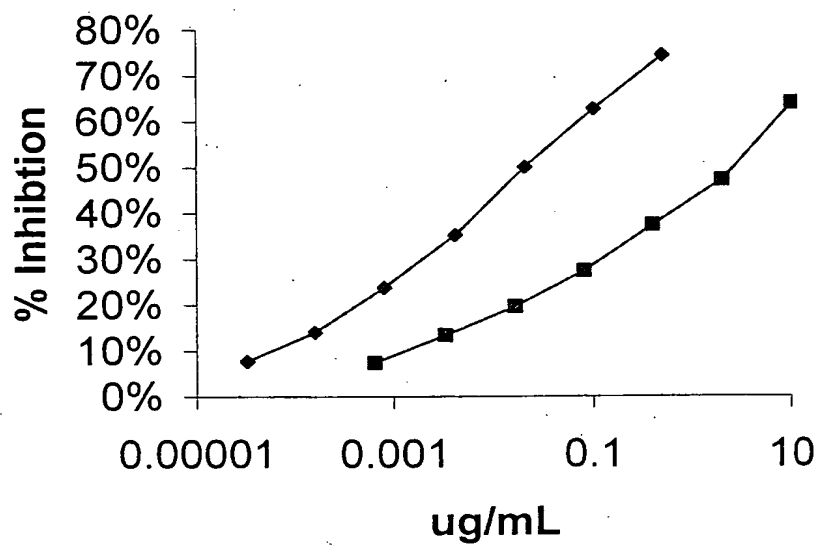
Figure 13

**Expression of insulin mRNA in INS-1 (832/13) cells**



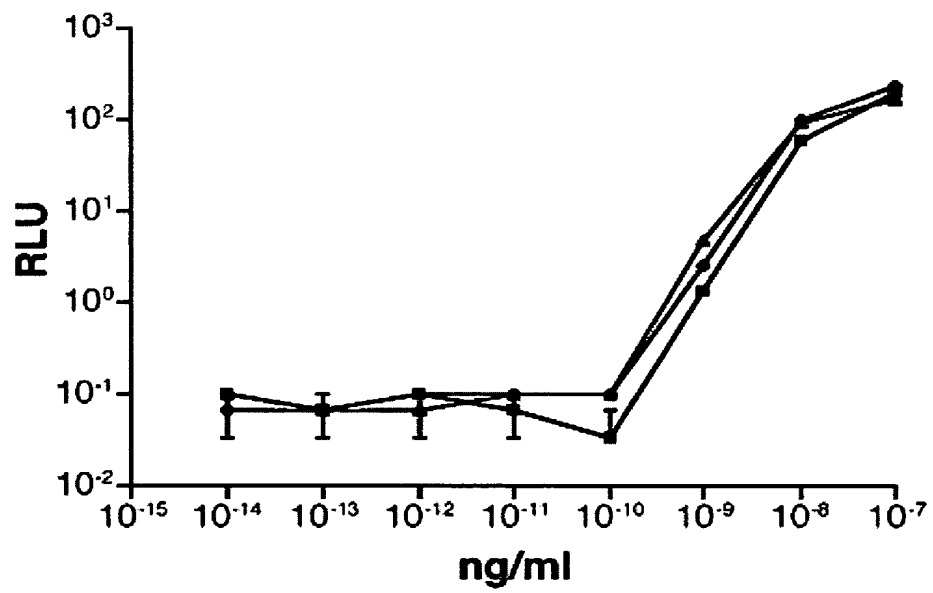
**Figure 14**

**Inhibition of proliferation of HS294T melanoma cells  
by IFN $\alpha$  albumin fusion protein**

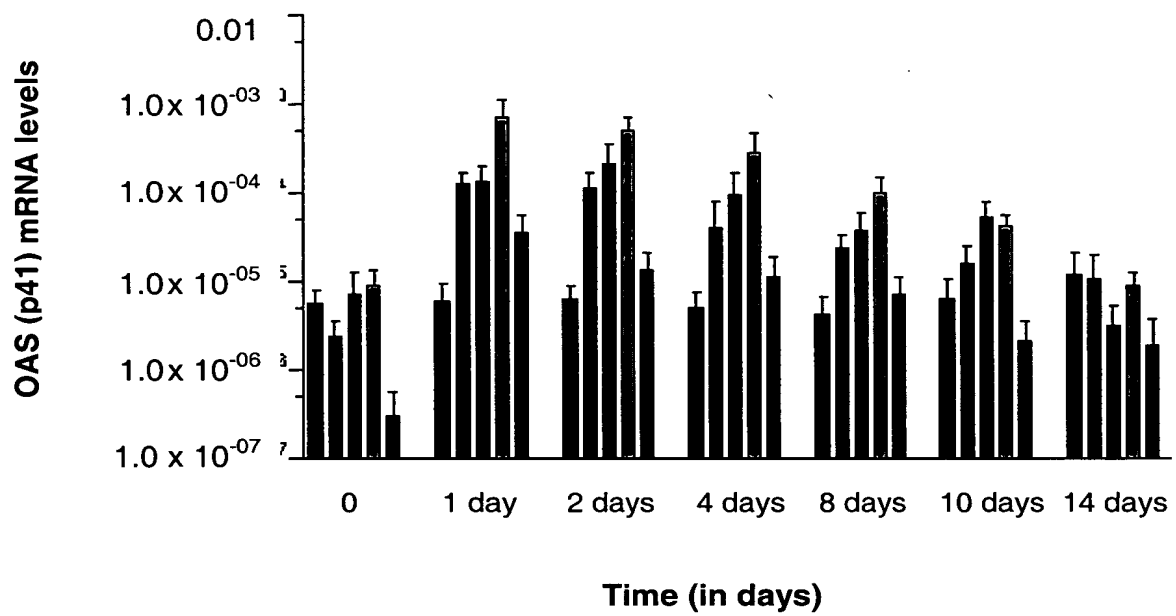


**Figure 15**

**SEAP activation with IFN $\alpha$  albumin  
fusion proteins**

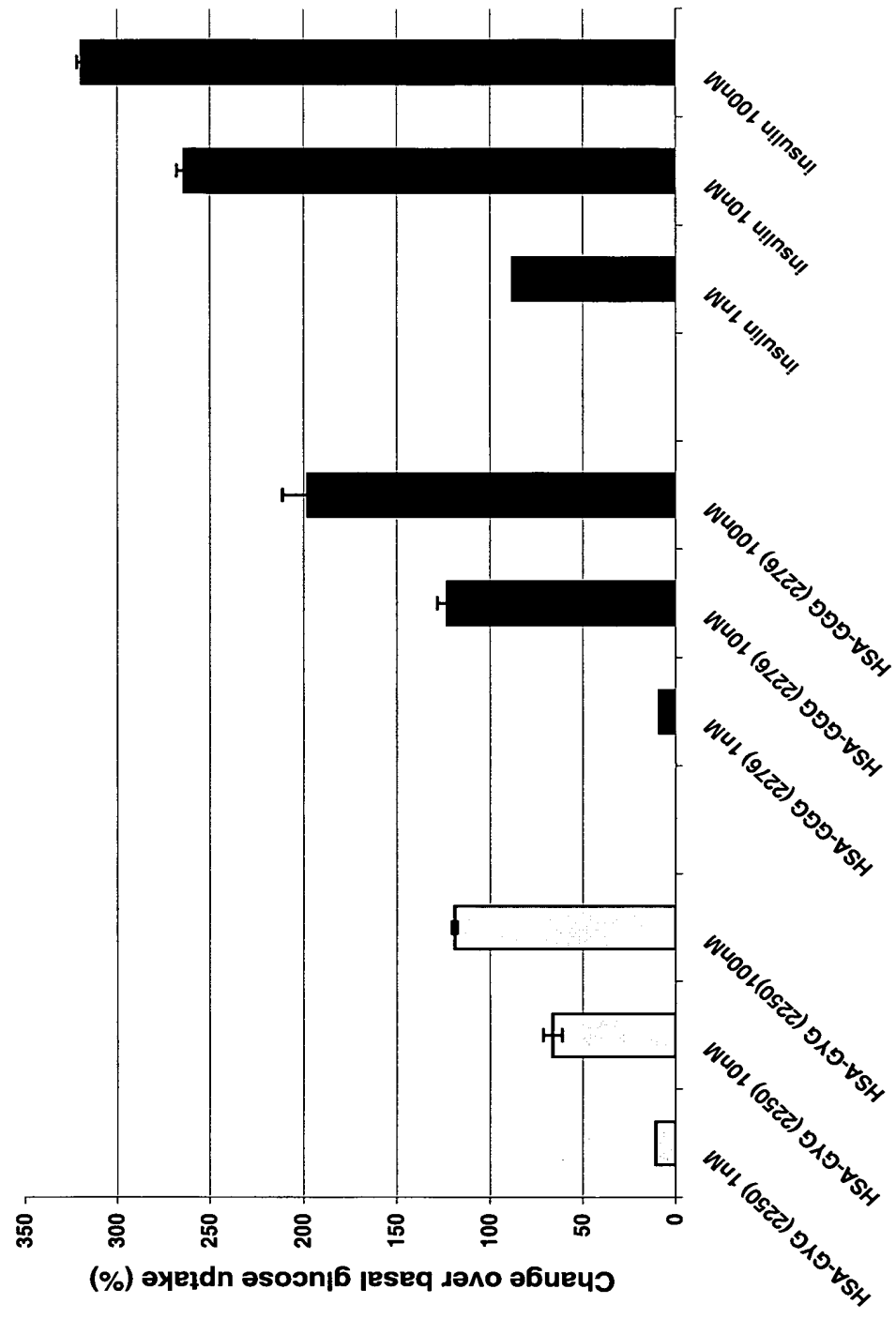


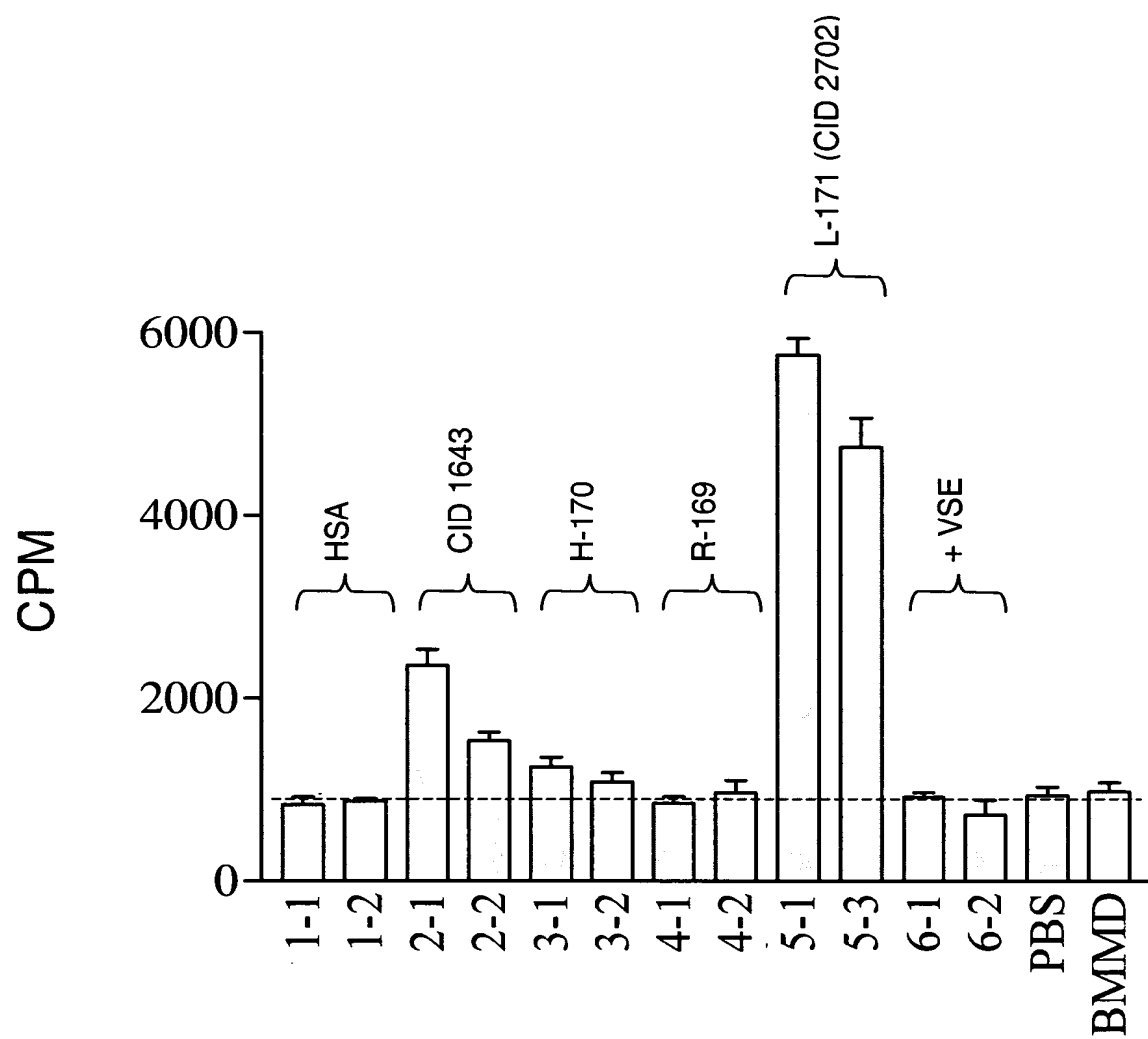
**Figure 16**



**Figure 17**

**FIGURE 18**  
**Glucose uptake in 3T3 L1 adipocytes**





**Figure 19**